Response to Comments on Technical Memorandum on Data Gap Investigation, Remedial Investigation, Wilcox Oil Company Superfund Site, Revision 01

12/4/2020

	Comment from EPA	EA Response
1	In Figure 2, MW3 is not labeled.	The figure has been updated.
2	In Figure 2, WPA-GW-8 is mapped in nearly the same location as WPA-GW-5. Is it mapped in the correct location? Does not seem likely that the field team would place these so close together. Why could it not be completed?	As stated in Section 2.4, well WPA-GW-8 was not installed due to refusal. WPA-GW-8 and WPA-GW-5 are mapped in the correct location. Text has been added to expand upon the close location of WPA-GW-8 and WPA-GW-5.
3	In Table 1, provide a note for WPA-GW-2, 3, and 8 saying why there are no data.	A note in Table 1 was added to address why there are no data for WPA-GW-2, 3, and 8.
4	In Figure 4, rename the red square, as these observations are not all NAPL.	Red square was renamed as 'Soil Sample Location with Product/Sheen'.
5	In Figure 4, perhaps add a delineation line for the NAPL/product and a secondary line for the sheen?	Two delineation lines were added - one for product and one for sheen.
6	In Figure 4, add additional text that clearly indicates that these locations are marked only if a sheen or product was noted and that borings with discoloration or odor are not marked on the map.	This information was added into the 'Notes'.
7	In Figure 5, WPA-GW-2 and GW-4 are labeled as RSL. This is the MCL map.	RSL' was relabeled to 'MCL' for wells WPA-GW-2 and MW-4 in Figure 4.
8	In Section 2.1 and Figure 3, the text indicates that recordings were made at 5 locations; however, only 3 are shown on the map. Clarify whether recordings were made at all 5 or attempted at 5 with only 3 giving good results.	All 5 recordings provided good results and the missing 2 have been added into Figure 3.
9	In Section 3.1, please include a statement related to the surface water concentrations and the results of the ECO & HH risk assessment. No identified excess risk identified for Sand Creek.	A statement has been added to the text.
10	Section 3.1 states that the water is perched and is a function of precipitation and infiltration. Section 3.2 indicates that this is a confined unit. Please clarify.	Section 3.2 has been corrected to clarify that this is an unconfined unit.
11	In Section 3.4, the difference between dissolved and total lead is 'significant' while the comparison of totals to dissolved for other metal is not. Similarly, concentrations of metals appear to be 'significantly' higher in the temporary wells vs the monitoring wells (similar screened intervals). Is there a possible explanation for this or a data gap that needs to be addressed?	EA's geochemist reviewed the lead data and stated the following: There is a significant difference in the dissolved concentrations of lead in the filtered and unfiltered samples that are likely attributed to precipitates or sorbed onto particles collected in the unfiltered (total) samples. I also noticed that the iron concentrations are quite high ranging from a few mg/L to a few hundred mg/L. This indicates that there is probably high ferrous iron in the water especially at the mildly acidic conditions in the wells. When the iron oxidizes at the wells it forms colloidal iron hydroxide particles that sorb lead strongly. This effectt is more pronounced in the temporary wells most likely because they are open hole, which would allow air to oxidize the iron and less filtration of colloids if they develped in the well bore. Section 2.4 explains that the temporary wells did not receive a filter pack and text was added to state that they did not produce enough water to develop. This would result in more sediment (turbid) samples and higher concentrations of metals.
12	In Section 3.4, the text appears to indicate that low oxygen is only present in MW-1 and MW-4. However, according the the map, the only location with elevated oxygen is GW-13. Should GW-13 be used in this mapping given the screened intervals are not in the same units as the monitoring or temporary wells?	GW-13 is no longer included in the contours shown in Figures 8-12 nor is it used as a reference well, as it is screened deeper than the monitoring wells. The text was also edited to reflect these changes.
13	In Section 4, please expand bullet 1 to indicate that the water is through seeps in the banks.	Text added to clarify groundwater discharge is through seeps in the bank.
14	In Section 4, please re-write bullet 6.	Has been rewritten.
15	In Section 4, bullet 7, clarify that this indicates these are in addition to those identified in the RI.	Text added to specify these areas are in addition to those identified during the RI.
16	Address typos and text errors in Section 2.4, last paragraph, sentence 2.	Revised by adding words and removing misplaced words.
17	Address typo in Section 2.4.1, WPA-GW-07.	Revised by removing typo in 'product'.
18	Address punctuation and typo in Section 3.4, paragraph 1, last sentence.	Revised by adding a period and fixing several typos.
19	In Table 4, the MCL column is blank on follow-on pages.	Revised.
20	When EA discusses investigating signs of MNA, that is incorrect. They are not looking for evidence of monitored natural attenuation because they are not actually monitoring (yet). They are looking for evidence of natural attenuation (NA).	Text has been revised.

Notes:
MCL = Maximum Contaminant Level
NAPL = non-aqueous phase liquid
RSL = Risk screening level.